



US006064987A

# United States Patent [19]

[11] **Patent Number:** **6,064,987**

**Walker et al.**

[45] **Date of Patent:** **May 16, 2000**

[54] **METHOD AND APPARATUS FOR PROVIDING AND PROCESSING INSTALLMENT PLANS AT A TERMINAL**

[75] Inventors: **Jay S. Walker**, Ridgefield; **James A. Jorasch**, Stamford; **Andrew S. Van Luchene**, Norwalk, all of Conn.

[73] Assignee: **Walker Digital, LLC**, Stamford, Conn.

[21] Appl. No.: **08/946,508**

[22] Filed: **Oct. 7, 1997**

### Related U.S. Application Data

[63] Continuation-in-part of application No. 08/920,116, Aug. 26, 1997, which is a continuation-in-part of application No. 08/822,709, Mar. 21, 1997.

[51] **Int. Cl.**<sup>7</sup> ..... **G06F 17/60**

[52] **U.S. Cl.** ..... **705/38; 705/30; 705/37; 705/39; 705/40**

[58] **Field of Search** ..... **705/38, 39, 40, 705/7, 1, 30, 34, 35; 380/4, 23, 24**

### [56] References Cited

#### U.S. PATENT DOCUMENTS

Re. 34,915	4/1995	Nichtberger et al. .	
3,573,747	4/1971	Adams et al. ....	705/37
4,108,361	8/1978	Krause .	
4,323,770	4/1982	Dieulot et al. .	
4,494,197	1/1985	Troy et al. .	
4,500,880	2/1985	Gomersall et al. .	
4,669,730	6/1987	Small .	
4,677,553	6/1987	Roberts et al. .	
4,689,742	8/1987	Troy et al. .	
4,723,212	2/1988	Mindrum et al. .	

(List continued on next page.)

#### FOREIGN PATENT DOCUMENTS

512413	11/1992	European Pat. Off. .
5242363	9/1993	Japan .
WO 9735441	9/1997	WIPO .

### OTHER PUBLICATIONS

Penny; Payments on the 'Net? How many? How safe? ABA Banking Journal v87, n11, p46-54; Dialogue, file: 268, Account#00275341, Nov. 1995.

Robert et al.; Credit risk, credit scoring, and the performance of home mortgages; Federal Reserve Bulletin, v82, n7, p621-648; Dialogue; File: 00290433, Jul. 1996.

Peter; Getting around to recurring payments; Credit Card Management, v9, n10, p52-57; Dialogue File: 00302703, Jan. 1997.

(List continued on next page.)

*Primary Examiner*—Allen R. MacDonald

*Assistant Examiner*—Romain Jeanty

*Attorney, Agent, or Firm*—Dean Alderucci; Kurt M. Maschoff

### ABSTRACT

[57] A central controller receives from a POS terminal a purchase price and a financial account identifier. The financial account identifier specifies a financial account, such as a credit card account. The central controller, in turn, generates one or more installment plan identifiers defining installment plans for payment of the purchase price. The installment plan identifiers are based on the purchase price and/or the financial account identifier. For example, certain accounts or certain high purchase prices may merit preferred installment plans. The installment plan identifiers are transmitted to the POS terminal. A purchaser at the POS terminal selects whether he would like to pay for his purchase in installments and, if so, using which installment plan. The POS terminal generates a selection signal indicative of whether to accept any of the installment plans, and transmits the selection signal to the central controller. The central controller receives the selection signal. If the selection signal indicates acceptance of any installment plan, use of the accepted installment plan for the financial account is authorized. Thereafter, bills are generated which reflect installment charges to be paid.

**44 Claims, 20 Drawing Sheets**

54

	CREDIT CARD ACCOUNT NUMBER <u>136</u>	PURCHASE PRICE <u>138</u>	TRANSACTION IDENTIFIER <u>140</u>	INSTALLMENT PLAN IDENTIFIER <u>142</u>	NUMBER OF PAYMENTS MADE <u>144</u>	INSTALLMENT AMOUNT <u>146</u>
130	1111-3333-3333-3333	\$221.47	118271	A	9	\$20.09
132	1111-2222-2222-2222	\$482.61	128497	A	4	\$43.79
134	1111-1111-1111-1111	\$435.97	130456	B	0	\$21.14

## U.S. PATENT DOCUMENTS

4,760,247	7/1988	Keane et al. .	
4,815,741	3/1989	Small .	
4,825,045	4/1989	Humble .	
4,839,507	6/1989	May .	
4,854,590	8/1989	Jolliff et al. .	
4,859,838	8/1989	Okiharu .	
4,882,473	11/1989	Bergeron et al. .	
4,908,761	3/1990	Tai .	
4,910,672	3/1990	Off et al. .	
4,922,522	5/1990	Scanlon .	
4,937,853	6/1990	Brule et al. .	
4,947,028	8/1990	Gorog .....	235/380
4,973,952	11/1990	Malec et al. .	
4,982,337	1/1991	Burr et al. .	
4,993,714	2/1991	Golightly .	
5,056,019	10/1991	Schultz et al. .	
5,119,295	6/1992	Kapur .	
5,128,862	7/1992	Mueller .	
5,132,914	7/1992	Cahlander et al. .	
5,172,328	12/1992	Cahlander et al. .	
5,173,851	12/1992	Off et al. .	
5,177,342	1/1993	Adams .	
5,192,854	3/1993	Counts .	
5,201,010	4/1993	Deaton et al. .	
5,216,595	6/1993	Protheroe .	
5,220,501	6/1993	Lawlor et al. ....	380/24
5,223,698	6/1993	Kapur .	
5,231,569	7/1993	Myatt et al. ....	705/38
5,239,165	8/1993	Novak .	
5,243,515	9/1993	Lee .....	705/37
5,245,533	9/1993	Marshall .	
5,262,941	11/1993	Saladin et al. .	
5,274,547	12/1993	Zoffel et al. .	
5,283,731	2/1994	Lalonde et al. ....	705/1
5,287,268	2/1994	McCarthy .	
5,297,031	3/1994	Guterman et al. ....	705/37
5,302,811	4/1994	Fukatsu .	
5,309,355	5/1994	Lockwood .	
5,353,218	10/1994	De Lapa et al. .	
5,353,219	10/1994	Mueller et al. .	
5,380,991	1/1995	Valencia et al. .	
5,383,113	1/1995	Kight et al. ....	705/40
5,420,606	5/1995	Begum et al. .	
5,459,306	10/1995	Stein et al. .	
5,481,094	1/1996	Suda .	
5,504,475	4/1996	Houdou et al. .	
5,510,979	4/1996	Moderi et al. .	
5,572,653	11/1996	DeTemple et al. .	
5,581,064	12/1996	Riley et al. .	
5,592,375	1/1997	Salmon et al. ....	705/7
5,592,376	1/1997	Hodroff .	
5,602,377	2/1997	Beller et al. .	
5,611,052	3/1997	Dykstra et al. ....	705/38
5,612,868	3/1997	Off et al. .	
5,615,269	3/1997	Micali .....	380/49
5,620,079	4/1997	Molbak .	
5,621,201	4/1997	Langhans .....	235/380
5,621,640	4/1997	Burke .	
5,632,010	5/1997	Briechle et al. .	
5,664,115	9/1997	Fraser .....	705/37
5,665,953	9/1997	Mazzamuto et al. .	
5,715,314	2/1998	Payne et al. ....	380/24
5,724,424	3/1998	Gifford .....	380/24
5,727,249	3/1998	Pollin .....	705/40
5,754,655	5/1998	Hughes et al. ....	380/24
5,809,144	9/1998	Sirbue et al. ....	380/25
5,903,879	5/1999	Mitchell .....	705/38

## OTHER PUBLICATIONS

Mobile claims to have the key to speedy card transactions; Credit Card News; Dialogue, File: 00307562, Mar. 1997.

“Cape Town”, Reuters Ltd., Nov. 8, 1979.

“Save the Mark”, Financial Times (London), p. I12, Feb. 1, 1983.

Cook, Louise, “ConsumerWatch: Clip, Snip, Save”, Business Wire, Mar. 12, 1984.

Green, Jan, “Farm Bills Please Assns; National Grocers Association”, Supermarket News, p. 6, Dec. 23, 1985.

“POS Spectrum: A Lottery Looks to POS for Growth”, POS News, p. 8, Jan. 1989.

Schrage, Michael, “An Experiment in Economic Theory; Labs Testing Real Markets”, The Bergen Record, p. B01, Nov. 26, 1989.

Schwall, Benjamin, “Let’s Play the Cash Register Receipts Lottery”, The New York Times (Late Edition), Dec. 25, 1990.

Philips Offers Customers Financing Through Citicorp, Philips Medical Systems North America, Citicorp North America Inc., Health Industry Today, p. 4, Jun. 1991.

“Coupons Get Serious; Supermarkets Use Barcodes to Prevent Misredemptions”, Chain Store Age Executive with Shopping Center Age, p. 68, Oct. 1992.

“Winn-Dixie/The Salvation Army Report Contributions For War Against Hunger”, PR Newswire, Jun. 10, 1993.

Jones, Jeanne, “Data Readers Streamline Management; Scanner Technology Aids Retailers As Well As Plants, Wholesalers”, The Houston Post, p. D1, Jun. 26, 1994.

Fiorinin, Phillip, ““No Place for Penny?” Smallest Coin Doesn’t Make Cents To Some”, USA Today, p. 1A, Jul. 29, 1994.

Smith, Alison, “Survey of UK Consumer Credit and Asset Finance”, The Financial Times, p. VI, Nov. 3, 1994.

Andreoli, Tom, “Cash Machines Offer a Whole Lotto Money For Withdrawl”, Crain’s Chicago Business, p. 8, Jun. 19, 1995.

Knippenberg, Jim, “Psst! Will Local Radio Empires Strike Back?”, p. F01, The Cincinnati Enquirer, Jul. 23, 1995.

“Spain: BBV Launches New Card”, Card International, p. 5, Jun. 22, 1995.

Hadley, Kimberly, “Pastors Praying Anti-arson Effort Will Burn Bias”, The Nashville Banner, p. A13, Jul. 26, 1996.

Gapper, John, “NatWest Reports Rise in Bad Debt”, The Financial Times, p. 9, London Edition, Jul. 31, 1996.

“Lynx Technology: Lynx to Provide Business Leasing Programme Through Schroder Leasing”, M2 Presswire, Aug. 9, 1996.

Taylor, Paul, “Towards a Dream Market”, The Financial Times (London), p. 3, Sep. 4, 1996.

Bonnici, Joseph, “Consumer Issues in Coupon Usage: An Exploratory Analysis”, pp. 31–40, Journal of Applied Business Research, Winter 1996/1997.

“Opinion: X-Press Betting”, La Fleur’s Lottery World, Feb. 7, 1997.

Singletary, Michelle, “Electronic World, Unchecked Problem? U.S. Move to Paperless Payments Raises Worries About Those Who Don’t Use Banks”, p. C01, The Washington Post, Mar. 4, 1997.

“Avco Financial Services”, downloaded from <http://www.homefurnish.com/NHFA/avco.htm> on May 23, 1997.

“Products and Services: Checkout Direct” downloaded from <http://catalinamktg.com/procdedir.htm> on May 29, 1997.

Riordan, Teresa, "Patents", p. D2, The New York Times, Jun. 9, 1997.

Nairn, Geoff, "The Key to Your Identity: Falling Costs Will Allow Fingerprint Verification To Be Widely Used", The Financial Times (London), p. 12, Jul. 15, 1997.

"about us; Classifieds2000: The Internet Classifieds", downloaded from <http://www.classifieds2000.com/cgi-cls/Display.exe?C2K+aboutus> on Aug. 6, 1997.

"Acquiring Credit", downloaded from <http://ianrwww.unl.edu/IANR/PUBS/NEBFACTS/NF91-2.HTM> on Sep. 3, 1997.

"About IAO", downloaded from <http://ww.iaoauction.com/about.htm> on Sep. 8, 1997.

"Siren Technologies/Introducing the Digital MenuBoard", Siren Technologies Inc. Brochure, (undated).

Michael Schrage, "An Experiment in Economic Theory; Labs Testing Real Markets", The Record, Nov. 26, 1989 at p. B01.

Laura Del Rosso, "Marketel Says It Plans to Launch Air Fare 'Auction' in June", Travel Weekly, Apr. 29, 1991 at p.1.

Jeff Peline, "Travelers Bidding on Airline Tickets: SF Firm Offers Chance for Cut-Rate Fares", The San Francisco Chronicle, Aug. 19, 1991 at p. A4.

Robert Kuttner, "Computers May Turn the World Into One Big Commodities Pit", Business Week, Sep. 11, 1989 at p. 17.

Laura Del Rosso, "Ticket-Bidding Firm Closes Its Doors", Travel Weekly, Mar. 12, 1992 at p. 1.

"Cyber Bid"(<http://www.cyberbid.com>) (1996).

John Kelsey and Bruce Schneier, "Conditional Purchase Offers", Apr. 4, 1997.

"How It All Works", The United Computer Exchange (<http://www.uce.com/howitworks>), download date: Jul. 23, 1997.

"About Us", Classifieds2000 (<http://www.classifieds2000.com>), download date: Aug. 6, 1997.

"General Trading Information and Terms Provided By tradingfloor.com" (<http://www.tradingfloor.com/info.htm>), download date: Aug. 14, 1997.

"What Is Nasdaq" (<http://www.axford.com/corfin/corfl1.htm>), download date: Aug. 15, 1997.

"About IAO", Interactive Auction Online (<http://www.iaoauction.com/about.htm>), download date: Sep. 8, 1997.

"Onsale Auction Supersite", Onsale, Inc. (<http://www.onsale.com>), download date: Sep. 8, 1997.

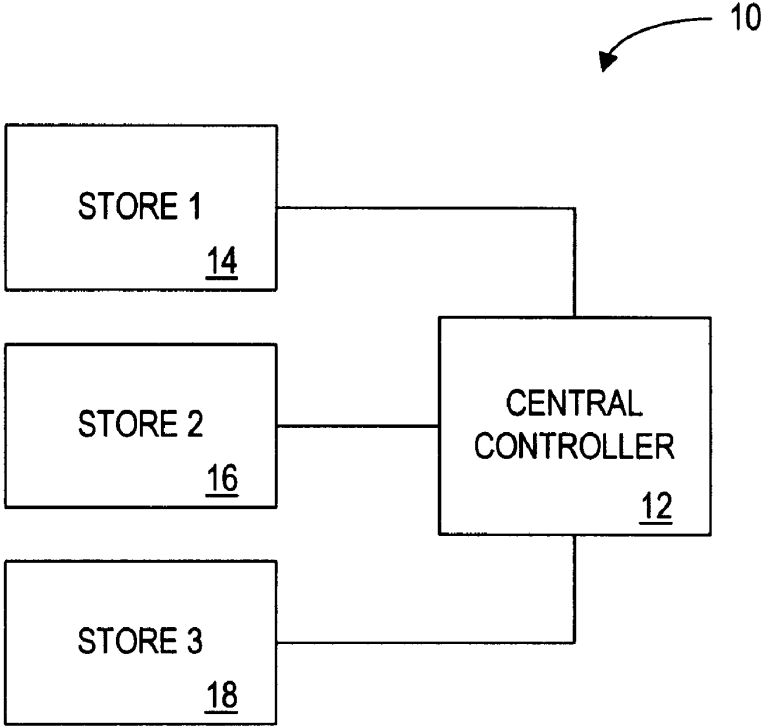


FIG. 1

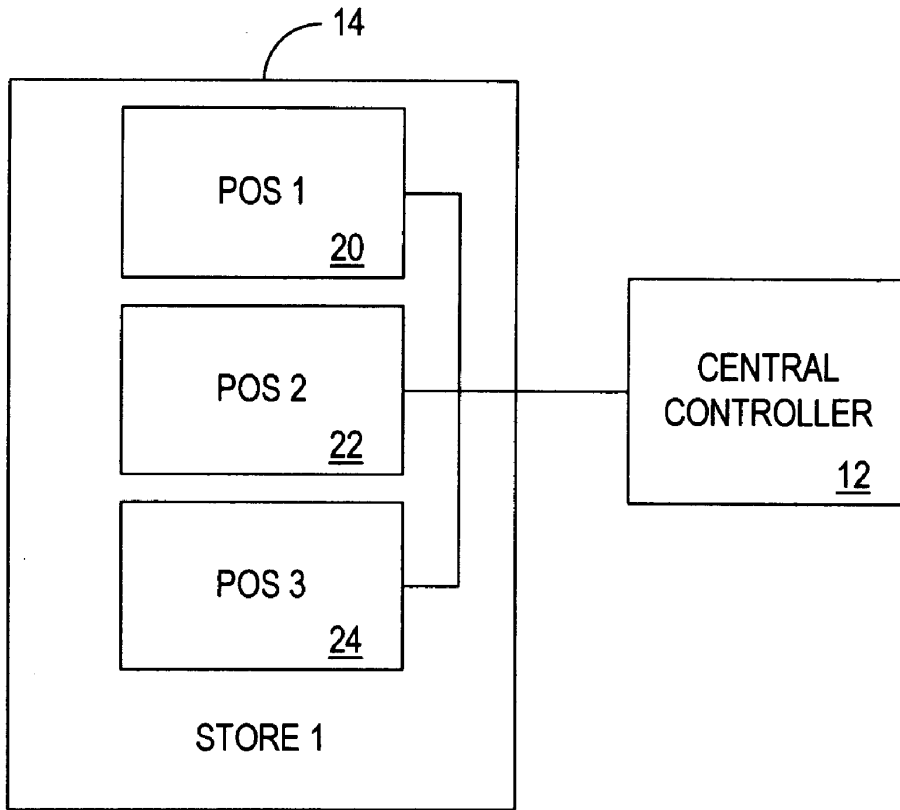


FIG. 2

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.